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*           I E R S   B U L L E T I N - A
*
*           Rapid Service/Prediction of Earth Orientation
*****
1 July 2021
Vol. XXXIV No. 026

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GENERAL INFORMATION:

To receive this information electronically, contact:

ser7@maia.usno.navy.mil or use
<http://maia.usno.navy.mil/docrequest.html>

MJD = Julian Date - 2 400 000.5 days

$$UT2-UT1 = 0.022 \sin(2\pi T) - 0.012 \cos(2\pi T) - 0.006 \sin(4\pi T) + 0.007 \cos(4\pi T)$$

where $\pi = 3.14159265\dots$ and T is the date in Besselian years.

TT = TAI + 32.184 seconds

DUT1= (UT1-UTC) transmitted with time signals

= -0.2 seconds beginning 02 May 2019 at 0000 UTC

= -0.1 seconds beginning 17 July 2021 at 0000 UTC

Beginning 1 January 2017:

TAI-UTC = 37.000 000 seconds

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*           There will NOT be a leap second introduced
*           in UTC at the end of June 2021
*
* The US Naval Observatory's Rapid Service/Prediction Center website
* (maia.usno.navy.mil) must undergo modernization and has been
* offline since 24 October 2019. The expected completion of work and
* return of service will be no earlier than Summer of 2021.
*
* Although the Bulletin A makes several references to maia, the
* paragraph above supersedes any information contained in the
* Bulletin A text.
*
* Updated EOPs are available at NASA's Archive of Space Geodesy Data:
* https://cddis.nasa.gov/archive/products/iers
* ftps://gdc.cddis.eosdis.nasa.gov/products/iers
* Daily EOP data may be available here by 18:00 UTC, and Bulletin A
* EOP data may be available by 20:00 UTC.
* For additional information on accessing CDDIS, please refer to:
* https://cddis.nasa.gov/About/CDDIS_File_Download_FAQ.html
*
* Updated EOPs may also be available at IERS:
* https://datacenter.iers.org/eop.php
* EOP data files are uploaded directly from USNO to this site each
* day. For further information, contact the IERS directly.
*
* Users should verify results obtained from these sites; we cannot
* guarantee the integrity or timeliness of files provided at
* third-party sites.
*
* Questions and enquiries about EOPs can be emailed to the
* following address:
* usn.ncr.navobsydc.mbx.eopcp@mail.mil
*
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The contributed observations used in the preparation of this Bulletin

are available at <<http://www.usno.navy.mil/USNO/earth-orientation/eo-info/general/input-data>>. The contributed analysis results are based on data from Very Long Baseline Interferometry (VLBI), Satellite Laser Ranging (SLR), the Global Positioning System (GPS) satellites, Lunar Laser Ranging (LLR), and meteorological predictions of variations in Atmospheric Angular Momentum (AAM).

COMBINED EARTH ORIENTATION PARAMETERS:

		IERS Rapid Service						
		MJD	x	error	y	error	UT1-UTC	error
			"	"	"	"	s	s
21	6 25	59390	0.19384	.00009	0.42627	.00009	-0.173565	0.000016
21	6 26	59391	0.19556	.00009	0.42504	.00009	-0.172383	0.000011
21	6 27	59392	0.19726	.00009	0.42402	.00009	-0.171140	0.000011
21	6 28	59393	0.19906	.00009	0.42311	.00009	-0.169977	0.000012
21	6 29	59394	0.20104	.00009	0.42200	.00009	-0.169003	0.000015
21	6 30	59395	0.20309	.00009	0.42070	.00009	-0.168192	0.000015
21	7 1	59396	0.20501	.00009	0.41941	.00009	-0.167432	0.000016

PREDICTIONS:

The following formulas will not reproduce the predictions given below, but may be used to extend the predictions beyond the end of this table.

$$x = 0.1326 + 0.0703 \cos A + 0.0995 \sin A + 0.0059 \cos C - 0.0409 \sin C$$

$$y = 0.3627 + 0.0966 \cos A - 0.0595 \sin A - 0.0409 \cos C - 0.0059 \sin C$$

$$UT1-UTC = -0.1539 + 0.00025 (MJD - 59404) - (UT2-UT1)$$

where $A = 2\pi * (MJD - 59396) / 365.25$ and $C = 2\pi * (MJD - 59396) / 435$.

TAI-UTC (MJD 59397) = 37.0

The accuracy may be estimated from the expressions:

S x,y = 0.00068 (MJD-59396)**0.80 S t = 0.00025 (MJD-59396)**0.75

Estimated accuracies are:

	10 d	20 d	30 d	40 d
Polar coord's	0.004	0.007	0.010	0.013
UT1-UTC	0.0014	0.0024	0.0032	0.0040

		MJD	x(arcsec)	y(arcsec)	UT1-UTC(sec)
2021	7 2	59397	0.2068	0.4182	-0.16672
2021	7 3	59398	0.2084	0.4169	-0.16597
2021	7 4	59399	0.2099	0.4157	-0.16514
2021	7 5	59400	0.2113	0.4146	-0.16420
2021	7 6	59401	0.2126	0.4134	-0.16312
2021	7 7	59402	0.2139	0.4122	-0.16189
2021	7 8	59403	0.2151	0.4110	-0.16055
2021	7 9	59404	0.2163	0.4097	-0.15913
2021	7 10	59405	0.2174	0.4085	-0.15767
2021	7 11	59406	0.2184	0.4073	-0.15623
2021	7 12	59407	0.2195	0.4060	-0.15487
2021	7 13	59408	0.2205	0.4048	-0.15367
2021	7 14	59409	0.2215	0.4035	-0.15267
2021	7 15	59410	0.2225	0.4023	-0.15185
2021	7 16	59411	0.2234	0.4011	-0.15120
2021	7 17	59412	0.2243	0.3998	-0.15066
2021	7 18	59413	0.2251	0.3985	-0.15014
2021	7 19	59414	0.2259	0.3973	-0.14955
2021	7 20	59415	0.2267	0.3960	-0.14878
2021	7 21	59416	0.2274	0.3947	-0.14780
2021	7 22	59417	0.2282	0.3934	-0.14666
2021	7 23	59418	0.2289	0.3921	-0.14544
2021	7 24	59419	0.2296	0.3907	-0.14427
2021	7 25	59420	0.2303	0.3894	-0.14322

2021	7	26	59421	0.2310	0.3880	-0.14236
2021	7	27	59422	0.2316	0.3866	-0.14167
2021	7	28	59423	0.2323	0.3852	-0.14112
2021	7	29	59424	0.2329	0.3837	-0.14062
2021	7	30	59425	0.2335	0.3823	-0.14011
2021	7	31	59426	0.2340	0.3808	-0.13954
2021	8	1	59427	0.2346	0.3793	-0.13886
2021	8	2	59428	0.2351	0.3779	-0.13805
2021	8	3	59429	0.2356	0.3763	-0.13709
2021	8	4	59430	0.2360	0.3748	-0.13601
2021	8	5	59431	0.2365	0.3733	-0.13484
2021	8	6	59432	0.2369	0.3717	-0.13365
2021	8	7	59433	0.2373	0.3702	-0.13249
2021	8	8	59434	0.2376	0.3686	-0.13143
2021	8	9	59435	0.2380	0.3670	-0.13054
2021	8	10	59436	0.2383	0.3654	-0.12988
2021	8	11	59437	0.2385	0.3639	-0.12944
2021	8	12	59438	0.2388	0.3623	-0.12917
2021	8	13	59439	0.2390	0.3606	-0.12901
2021	8	14	59440	0.2392	0.3590	-0.12885
2021	8	15	59441	0.2393	0.3574	-0.12858
2021	8	16	59442	0.2395	0.3558	-0.12812
2021	8	17	59443	0.2395	0.3542	-0.12745
2021	8	18	59444	0.2396	0.3525	-0.12659
2021	8	19	59445	0.2396	0.3509	-0.12562
2021	8	20	59446	0.2396	0.3493	-0.12466
2021	8	21	59447	0.2396	0.3476	-0.12380
2021	8	22	59448	0.2395	0.3460	-0.12311
2021	8	23	59449	0.2394	0.3444	-0.12261
2021	8	24	59450	0.2393	0.3427	-0.12226
2021	8	25	59451	0.2392	0.3411	-0.12202
2021	8	26	59452	0.2390	0.3395	-0.12179
2021	8	27	59453	0.2388	0.3378	-0.12150
2021	8	28	59454	0.2385	0.3362	-0.12110
2021	8	29	59455	0.2383	0.3346	-0.12054
2021	8	30	59456	0.2380	0.3329	-0.11983
2021	8	31	59457	0.2376	0.3313	-0.11896
2021	9	1	59458	0.2373	0.3297	-0.11799
2021	9	2	59459	0.2369	0.3281	-0.11695
2021	9	3	59460	0.2364	0.3264	-0.11593
2021	9	4	59461	0.2360	0.3248	-0.11499
2021	9	5	59462	0.2355	0.3232	-0.11422
2021	9	6	59463	0.2350	0.3216	-0.11368
2021	9	7	59464	0.2344	0.3200	-0.11340
2021	9	8	59465	0.2339	0.3184	-0.11336
2021	9	9	59466	0.2333	0.3169	-0.11348
2021	9	10	59467	0.2326	0.3153	-0.11363
2021	9	11	59468	0.2320	0.3137	-0.11369
2021	9	12	59469	0.2313	0.3121	-0.11356
2021	9	13	59470	0.2306	0.3106	-0.11319
2021	9	14	59471	0.2298	0.3090	-0.11261
2021	9	15	59472	0.2290	0.3075	-0.11189
2021	9	16	59473	0.2282	0.3060	-0.11114
2021	9	17	59474	0.2274	0.3045	-0.11047
2021	9	18	59475	0.2265	0.3030	-0.10997
2021	9	19	59476	0.2257	0.3015	-0.10966
2021	9	20	59477	0.2247	0.3000	-0.10956
2021	9	21	59478	0.2238	0.2985	-0.10959
2021	9	22	59479	0.2228	0.2971	-0.10968
2021	9	23	59480	0.2218	0.2956	-0.10977
2021	9	24	59481	0.2208	0.2942	-0.10977
2021	9	25	59482	0.2197	0.2928	-0.10964
2021	9	26	59483	0.2186	0.2914	-0.10936
2021	9	27	59484	0.2175	0.2900	-0.10894
2021	9	28	59485	0.2164	0.2886	-0.10839

2021	9	29	59486	0.2152	0.2873	-0.10776
2021	9	30	59487	0.2141	0.2859	-0.10713
2021	10	1	59488	0.2128	0.2846	-0.10655
2021	10	2	59489	0.2116	0.2833	-0.10612
2021	10	3	59490	0.2104	0.2820	-0.10589
2021	10	4	59491	0.2091	0.2807	-0.10593
2021	10	5	59492	0.2078	0.2795	-0.10624
2021	10	6	59493	0.2064	0.2782	-0.10676
2021	10	7	59494	0.2051	0.2770	-0.10738
2021	10	8	59495	0.2037	0.2758	-0.10796
2021	10	9	59496	0.2023	0.2746	-0.10836
2021	10	10	59497	0.2009	0.2735	-0.10851
2021	10	11	59498	0.1994	0.2723	-0.10840
2021	10	12	59499	0.1980	0.2712	-0.10811
2021	10	13	59500	0.1965	0.2701	-0.10775
2021	10	14	59501	0.1950	0.2691	-0.10743
2021	10	15	59502	0.1934	0.2680	-0.10724
2021	10	16	59503	0.1919	0.2670	-0.10723
2021	10	17	59504	0.1903	0.2660	-0.10740
2021	10	18	59505	0.1887	0.2650	-0.10776
2021	10	19	59506	0.1871	0.2640	-0.10819
2021	10	20	59507	0.1855	0.2631	-0.10863
2021	10	21	59508	0.1839	0.2622	-0.10899
2021	10	22	59509	0.1822	0.2613	-0.10922
2021	10	23	59510	0.1805	0.2604	-0.10929
2021	10	24	59511	0.1788	0.2596	-0.10919
2021	10	25	59512	0.1771	0.2587	-0.10894
2021	10	26	59513	0.1754	0.2579	-0.10859
2021	10	27	59514	0.1736	0.2572	-0.10819
2021	10	28	59515	0.1719	0.2564	-0.10782
2021	10	29	59516	0.1701	0.2557	-0.10754
2021	10	30	59517	0.1683	0.2550	-0.10744
2021	10	31	59518	0.1665	0.2544	-0.10757
2021	11	1	59519	0.1647	0.2537	-0.10796
2021	11	2	59520	0.1629	0.2531	-0.10859
2021	11	3	59521	0.1611	0.2525	-0.10938
2021	11	4	59522	0.1592	0.2520	-0.11020
2021	11	5	59523	0.1574	0.2514	-0.11091
2021	11	6	59524	0.1555	0.2509	-0.11137
2021	11	7	59525	0.1536	0.2505	-0.11156
2021	11	8	59526	0.1517	0.2500	-0.11150
2021	11	9	59527	0.1498	0.2496	-0.11131
2021	11	10	59528	0.1479	0.2492	-0.11111
2021	11	11	59529	0.1460	0.2489	-0.11101
2021	11	12	59530	0.1441	0.2485	-0.11106
2021	11	13	59531	0.1421	0.2482	-0.11127
2021	11	14	59532	0.1402	0.2480	-0.11160
2021	11	15	59533	0.1383	0.2477	-0.11200
2021	11	16	59534	0.1363	0.2475	-0.11240
2021	11	17	59535	0.1344	0.2473	-0.11274
2021	11	18	59536	0.1324	0.2472	-0.11295
2021	11	19	59537	0.1305	0.2470	-0.11300
2021	11	20	59538	0.1285	0.2469	-0.11287
2021	11	21	59539	0.1265	0.2469	-0.11258
2021	11	22	59540	0.1246	0.2468	-0.11215
2021	11	23	59541	0.1226	0.2468	-0.11164
2021	11	24	59542	0.1206	0.2468	-0.11112
2021	11	25	59543	0.1187	0.2469	-0.11067
2021	11	26	59544	0.1167	0.2470	-0.11034
2021	11	27	59545	0.1147	0.2471	-0.11020
2021	11	28	59546	0.1128	0.2472	-0.11028
2021	11	29	59547	0.1108	0.2474	-0.11060
2021	11	30	59548	0.1088	0.2476	-0.11110
2021	12	1	59549	0.1069	0.2478	-0.11169
2021	12	2	59550	0.1049	0.2481	-0.11224

2021	12	3	59551	0.1029	0.2484	-0.11262
2021	12	4	59552	0.1010	0.2487	-0.11273
2021	12	5	59553	0.0991	0.2491	-0.11258
2021	12	6	59554	0.0971	0.2495	-0.11224
2021	12	7	59555	0.0952	0.2499	-0.11184
2021	12	8	59556	0.0933	0.2503	-0.11151
2021	12	9	59557	0.0913	0.2508	-0.11132
2021	12	10	59558	0.0894	0.2513	-0.11130
2021	12	11	59559	0.0875	0.2518	-0.11141
2021	12	12	59560	0.0856	0.2524	-0.11159
2021	12	13	59561	0.0837	0.2530	-0.11177
2021	12	14	59562	0.0819	0.2536	-0.11188
2021	12	15	59563	0.0800	0.2542	-0.11188
2021	12	16	59564	0.0781	0.2549	-0.11173
2021	12	17	59565	0.0763	0.2556	-0.11140
2021	12	18	59566	0.0745	0.2563	-0.11090
2021	12	19	59567	0.0726	0.2571	-0.11026
2021	12	20	59568	0.0708	0.2579	-0.10952
2021	12	21	59569	0.0690	0.2587	-0.10876
2021	12	22	59570	0.0673	0.2596	-0.10804
2021	12	23	59571	0.0655	0.2604	-0.10743
2021	12	24	59572	0.0637	0.2613	-0.10698
2021	12	25	59573	0.0620	0.2623	-0.10673
2021	12	26	59574	0.0603	0.2632	-0.10669
2021	12	27	59575	0.0586	0.2642	-0.10682
2021	12	28	59576	0.0569	0.2652	-0.10706
2021	12	29	59577	0.0552	0.2663	-0.10731
2021	12	30	59578	0.0536	0.2673	-0.10744
2021	12	31	59579	0.0520	0.2684	-0.10736
2022	1	1	59580	0.0503	0.2695	-0.10701
2022	1	2	59581	0.0488	0.2707	-0.10645
2022	1	3	59582	0.0472	0.2718	-0.10578
2022	1	4	59583	0.0456	0.2730	-0.10514
2022	1	5	59584	0.0441	0.2742	-0.10464
2022	1	6	59585	0.0426	0.2755	-0.10433
2022	1	7	59586	0.0411	0.2767	-0.10420
2022	1	8	59587	0.0396	0.2780	-0.10419
2022	1	9	59588	0.0382	0.2793	-0.10423
2022	1	10	59589	0.0368	0.2807	-0.10423
2022	1	11	59590	0.0354	0.2820	-0.10413
2022	1	12	59591	0.0340	0.2834	-0.10388
2022	1	13	59592	0.0326	0.2848	-0.10345
2022	1	14	59593	0.0313	0.2862	-0.10283
2022	1	15	59594	0.0300	0.2876	-0.10206
2022	1	16	59595	0.0287	0.2891	-0.10120
2022	1	17	59596	0.0275	0.2906	-0.10030
2022	1	18	59597	0.0262	0.2921	-0.09946
2022	1	19	59598	0.0250	0.2936	-0.09874
2022	1	20	59599	0.0239	0.2952	-0.09822
2022	1	21	59600	0.0227	0.2967	-0.09792
2022	1	22	59601	0.0216	0.2983	-0.09785
2022	1	23	59602	0.0205	0.2999	-0.09799
2022	1	24	59603	0.0194	0.3015	-0.09826
2022	1	25	59604	0.0184	0.3031	-0.09858
2022	1	26	59605	0.0174	0.3048	-0.09883
2022	1	27	59606	0.0164	0.3065	-0.09892
2022	1	28	59607	0.0155	0.3081	-0.09878
2022	1	29	59608	0.0146	0.3098	-0.09842
2022	1	30	59609	0.0137	0.3116	-0.09793
2022	1	31	59610	0.0128	0.3133	-0.09743
2022	2	1	59611	0.0120	0.3150	-0.09707
2022	2	2	59612	0.0112	0.3168	-0.09692
2022	2	3	59613	0.0104	0.3186	-0.09700
2022	2	4	59614	0.0097	0.3203	-0.09727
2022	2	5	59615	0.0090	0.3221	-0.09765

2022	2	6	59616	0.0083	0.3239	-0.09806
2022	2	7	59617	0.0077	0.3258	-0.09841
2022	2	8	59618	0.0071	0.3276	-0.09863
2022	2	9	59619	0.0065	0.3294	-0.09870
2022	2	10	59620	0.0059	0.3313	-0.09859
2022	2	11	59621	0.0054	0.3331	-0.09829
2022	2	12	59622	0.0049	0.3350	-0.09784
2022	2	13	59623	0.0045	0.3369	-0.09734
2022	2	14	59624	0.0041	0.3388	-0.09689
2022	2	15	59625	0.0037	0.3407	-0.09653
2022	2	16	59626	0.0034	0.3426	-0.09630
2022	2	17	59627	0.0030	0.3445	-0.09625
2022	2	18	59628	0.0028	0.3464	-0.09645
2022	2	19	59629	0.0025	0.3483	-0.09680
2022	2	20	59630	0.0023	0.3502	-0.09740
2022	2	21	59631	0.0021	0.3522	-0.09802
2022	2	22	59632	0.0020	0.3541	-0.09856
2022	2	23	59633	0.0019	0.3560	-0.09890
2022	2	24	59634	0.0018	0.3580	-0.09896
2022	2	25	59635	0.0017	0.3599	-0.09878
2022	2	26	59636	0.0017	0.3618	-0.09849
2022	2	27	59637	0.0018	0.3638	-0.09818
2022	2	28	59638	0.0018	0.3657	-0.09803
2022	3	1	59639	0.0019	0.3677	-0.09806
2022	3	2	59640	0.0020	0.3696	-0.09832
2022	3	3	59641	0.0022	0.3716	-0.09881
2022	3	4	59642	0.0024	0.3735	-0.09943
2022	3	5	59643	0.0026	0.3755	-0.10011
2022	3	6	59644	0.0029	0.3774	-0.10072
2022	3	7	59645	0.0032	0.3793	-0.10122
2022	3	8	59646	0.0035	0.3813	-0.10159
2022	3	9	59647	0.0039	0.3832	-0.10172
2022	3	10	59648	0.0043	0.3851	-0.10160
2022	3	11	59649	0.0047	0.3870	-0.10134
2022	3	12	59650	0.0052	0.3889	-0.10106
2022	3	13	59651	0.0057	0.3909	-0.10084
2022	3	14	59652	0.0062	0.3928	-0.10071
2022	3	15	59653	0.0068	0.3947	-0.10071
2022	3	16	59654	0.0074	0.3965	-0.10089
2022	3	17	59655	0.0080	0.3984	-0.10129
2022	3	18	59656	0.0087	0.4003	-0.10186
2022	3	19	59657	0.0094	0.4022	-0.10259
2022	3	20	59658	0.0101	0.4040	-0.10346
2022	3	21	59659	0.0109	0.4059	-0.10432
2022	3	22	59660	0.0117	0.4077	-0.10505
2022	3	23	59661	0.0125	0.4095	-0.10558
2022	3	24	59662	0.0133	0.4113	-0.10595
2022	3	25	59663	0.0142	0.4131	-0.10619
2022	3	26	59664	0.0152	0.4149	-0.10634
2022	3	27	59665	0.0161	0.4167	-0.10643
2022	3	28	59666	0.0171	0.4184	-0.10660
2022	3	29	59667	0.0181	0.4202	-0.10693
2022	3	30	59668	0.0192	0.4219	-0.10745
2022	3	31	59669	0.0202	0.4236	-0.10815
2022	4	1	59670	0.0213	0.4253	-0.10883
2022	4	2	59671	0.0225	0.4270	-0.10943
2022	4	3	59672	0.0236	0.4287	-0.10985
2022	4	4	59673	0.0248	0.4303	-0.11011
2022	4	5	59674	0.0260	0.4320	-0.11013
2022	4	6	59675	0.0273	0.4336	-0.10993
2022	4	7	59676	0.0286	0.4352	-0.10960
2022	4	8	59677	0.0299	0.4368	-0.10914
2022	4	9	59678	0.0312	0.4383	-0.10858
2022	4	10	59679	0.0326	0.4399	-0.10812
2022	4	11	59680	0.0339	0.4414	-0.10779

2022	4	12	59681	0.0354	0.4429	-0.10763
2022	4	13	59682	0.0368	0.4444	-0.10768
2022	4	14	59683	0.0383	0.4458	-0.10792
2022	4	15	59684	0.0397	0.4473	-0.10830
2022	4	16	59685	0.0413	0.4487	-0.10876
2022	4	17	59686	0.0428	0.4501	-0.10925
2022	4	18	59687	0.0444	0.4514	-0.10963
2022	4	19	59688	0.0459	0.4528	-0.10981
2022	4	20	59689	0.0476	0.4541	-0.10973
2022	4	21	59690	0.0492	0.4554	-0.10957
2022	4	22	59691	0.0508	0.4567	-0.10943
2022	4	23	59692	0.0525	0.4579	-0.10928
2022	4	24	59693	0.0542	0.4592	-0.10922
2022	4	25	59694	0.0559	0.4604	-0.10930
2022	4	26	59695	0.0577	0.4615	-0.10954
2022	4	27	59696	0.0594	0.4627	-0.10990
2022	4	28	59697	0.0612	0.4638	-0.11034
2022	4	29	59698	0.0630	0.4649	-0.11077
2022	4	30	59699	0.0648	0.4660	-0.11110
2022	5	1	59700	0.0666	0.4670	-0.11131
2022	5	2	59701	0.0685	0.4680	-0.11134
2022	5	3	59702	0.0704	0.4690	-0.11119
2022	5	4	59703	0.0722	0.4700	-0.11083
2022	5	5	59704	0.0741	0.4709	-0.11027
2022	5	6	59705	0.0761	0.4718	-0.10963
2022	5	7	59706	0.0780	0.4727	-0.10897
2022	5	8	59707	0.0799	0.4736	-0.10827
2022	5	9	59708	0.0819	0.4744	-0.10770
2022	5	10	59709	0.0839	0.4752	-0.10730
2022	5	11	59710	0.0858	0.4759	-0.10711
2022	5	12	59711	0.0878	0.4766	-0.10707
2022	5	13	59712	0.0898	0.4773	-0.10719
2022	5	14	59713	0.0919	0.4780	-0.10735
2022	5	15	59714	0.0939	0.4787	-0.10741
2022	5	16	59715	0.0959	0.4793	-0.10724
2022	5	17	59716	0.0980	0.4798	-0.10683
2022	5	18	59717	0.1001	0.4804	-0.10610
2022	5	19	59718	0.1021	0.4809	-0.10520
2022	5	20	59719	0.1042	0.4814	-0.10433
2022	5	21	59720	0.1063	0.4818	-0.10362
2022	5	22	59721	0.1084	0.4822	-0.10311
2022	5	23	59722	0.1105	0.4826	-0.10286
2022	5	24	59723	0.1126	0.4830	-0.10281
2022	5	25	59724	0.1147	0.4833	-0.10284
2022	5	26	59725	0.1168	0.4836	-0.10286
2022	5	27	59726	0.1189	0.4839	-0.10278
2022	5	28	59727	0.1210	0.4841	-0.10250
2022	5	29	59728	0.1232	0.4843	-0.10197
2022	5	30	59729	0.1253	0.4845	-0.10132
2022	5	31	59730	0.1274	0.4846	-0.10049
2022	6	1	59731	0.1295	0.4847	-0.09949
2022	6	2	59732	0.1317	0.4847	-0.09842
2022	6	3	59733	0.1338	0.4848	-0.09744
2022	6	4	59734	0.1359	0.4848	-0.09656
2022	6	5	59735	0.1381	0.4848	-0.09579
2022	6	6	59736	0.1402	0.4847	-0.09524
2022	6	7	59737	0.1423	0.4846	-0.09491
2022	6	8	59738	0.1444	0.4845	-0.09485
2022	6	9	59739	0.1465	0.4843	-0.09501
2022	6	10	59740	0.1487	0.4841	-0.09524
2022	6	11	59741	0.1508	0.4839	-0.09545
2022	6	12	59742	0.1529	0.4836	-0.09553
2022	6	13	59743	0.1550	0.4833	-0.09532
2022	6	14	59744	0.1571	0.4830	-0.09489
2022	6	15	59745	0.1591	0.4827	-0.09418

2022	6	16	59746	0.1612	0.4823	-0.09332
2022	6	17	59747	0.1633	0.4819	-0.09247
2022	6	18	59748	0.1653	0.4814	-0.09168
2022	6	19	59749	0.1674	0.4809	-0.09101
2022	6	20	59750	0.1694	0.4804	-0.09046
2022	6	21	59751	0.1715	0.4799	-0.08994
2022	6	22	59752	0.1735	0.4793	-0.08943
2022	6	23	59753	0.1755	0.4787	-0.08888
2022	6	24	59754	0.1775	0.4781	-0.08820
2022	6	25	59755	0.1795	0.4774	-0.08733
2022	6	26	59756	0.1814	0.4767	-0.08628
2022	6	27	59757	0.1834	0.4760	-0.08505
2022	6	28	59758	0.1853	0.4752	-0.08361
2022	6	29	59759	0.1873	0.4744	-0.08202
2022	6	30	59760	0.1892	0.4736	-0.08041
2022	7	1	59761	0.1911	0.4727	-0.07883

These predictions are based on all announced leap seconds.

CELESTIAL POLE OFFSET SERIES:

NEOS Celestial Pole Offset Series				
MJD	dpsi	error	deps	error
(msec. of arc)				
59376	-108.64	0.52	-10.27	0.13
59377	-108.67	0.50	-10.25	0.13
59378	-108.81	0.58	-10.16	0.12
59379	-108.99	0.78	-10.10	0.11
59380	-109.10	0.78	-10.09	0.11
59381	-109.03	0.74	-10.08	0.15
59382	-108.86	0.74	-10.05	0.15
59383	-108.82	0.74	-10.01	0.15

IAU2000A Celestial Pole Offset Series				
MJD	dX	error	dY	error
(msec. of arc)				
59376	0.213	0.208	-0.130	0.132
59377	0.224	0.200	-0.128	0.127
59378	0.240	0.232	-0.127	0.119
59379	0.256	0.310	-0.130	0.107
59380	0.268	0.310	-0.140	0.107
59381	0.272	0.295	-0.158	0.149
59382	0.271	0.295	-0.182	0.149
59383	0.266	0.295	-0.211	0.149

The recommended software to predict celestial pole offsets can be found at <http://www.usno.navy.mil/USNO/earth-orientation/software/aux/ceppred.f> and software for the calculation of the dX and dY components with respect to IAU2000A Nutation/Precession Theory can be found at the <http://maia.usno.navy.mil/conv2010/conventions.html> web site in Chapter 5 Section 5.5 of the IERS Conventions (2010).